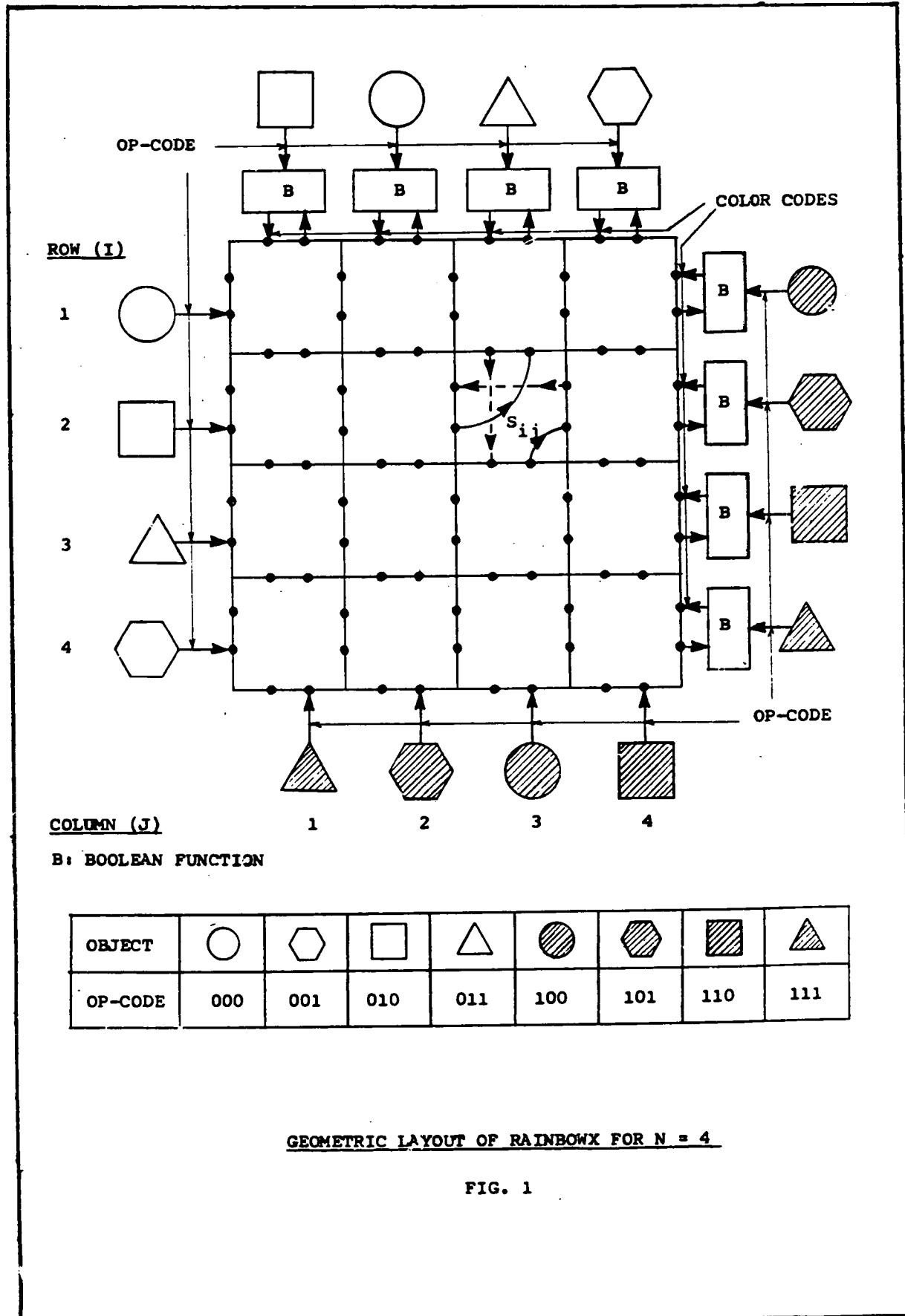


273/460 As Originally Filed

07/754465

330
24



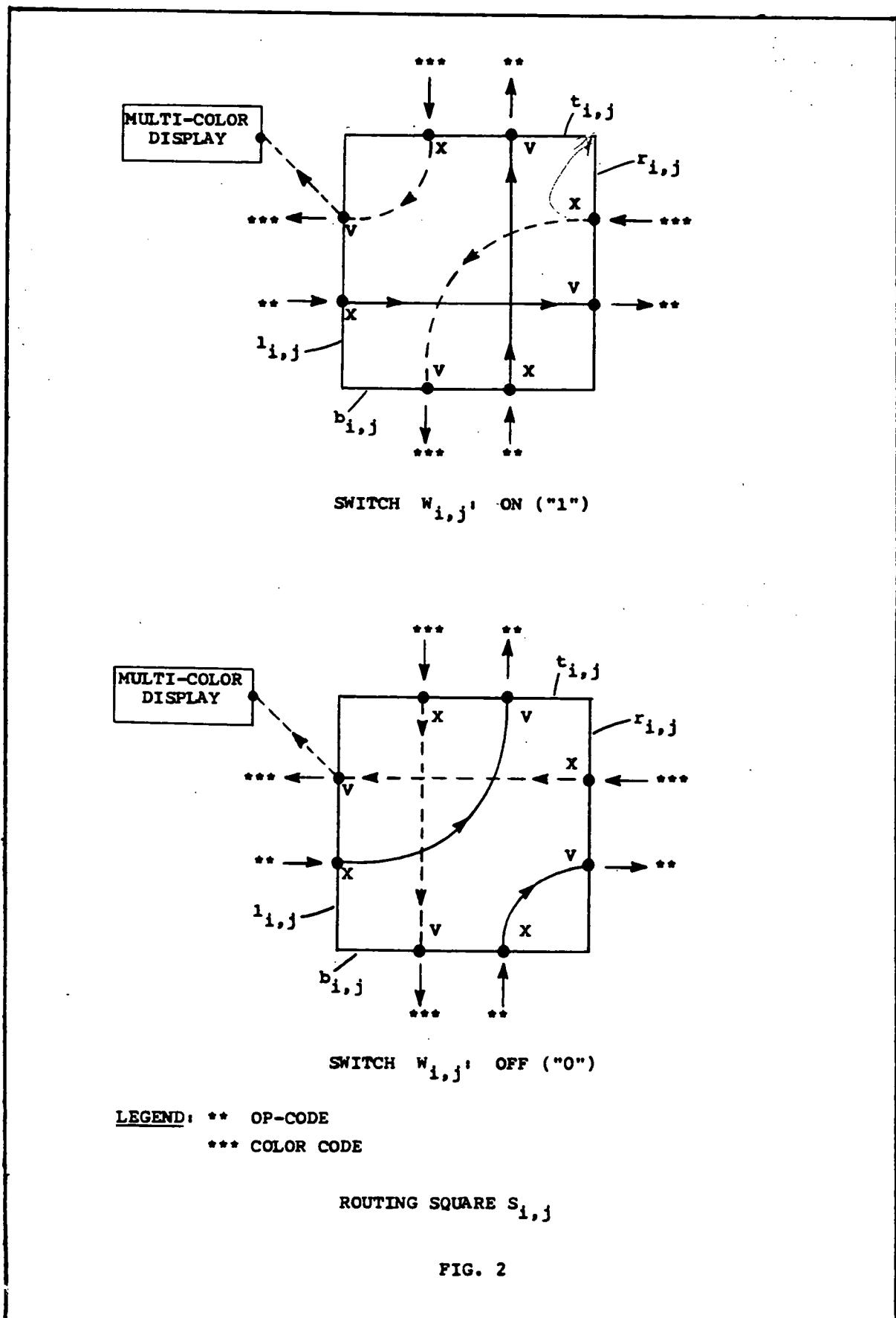
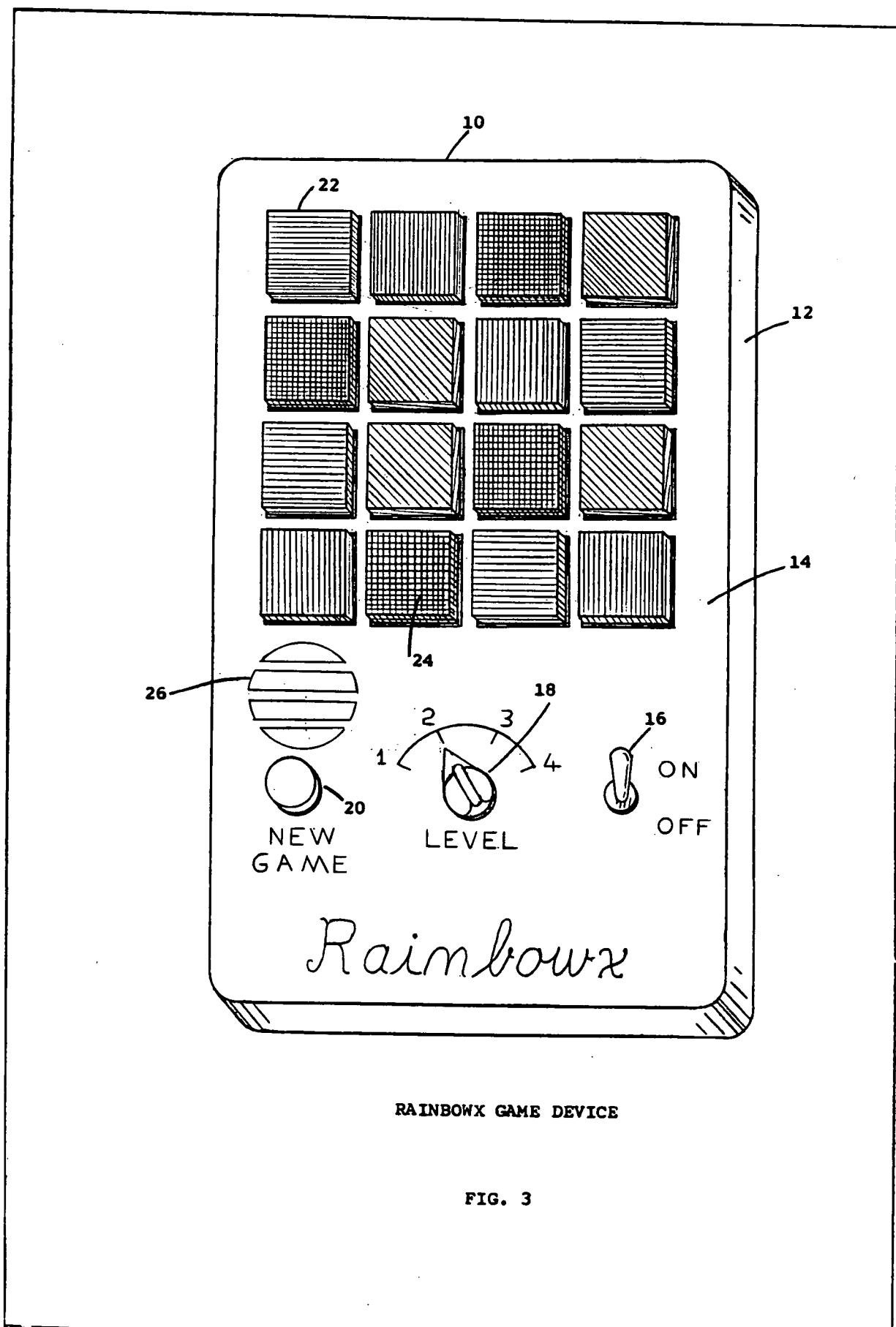


FIG. 2



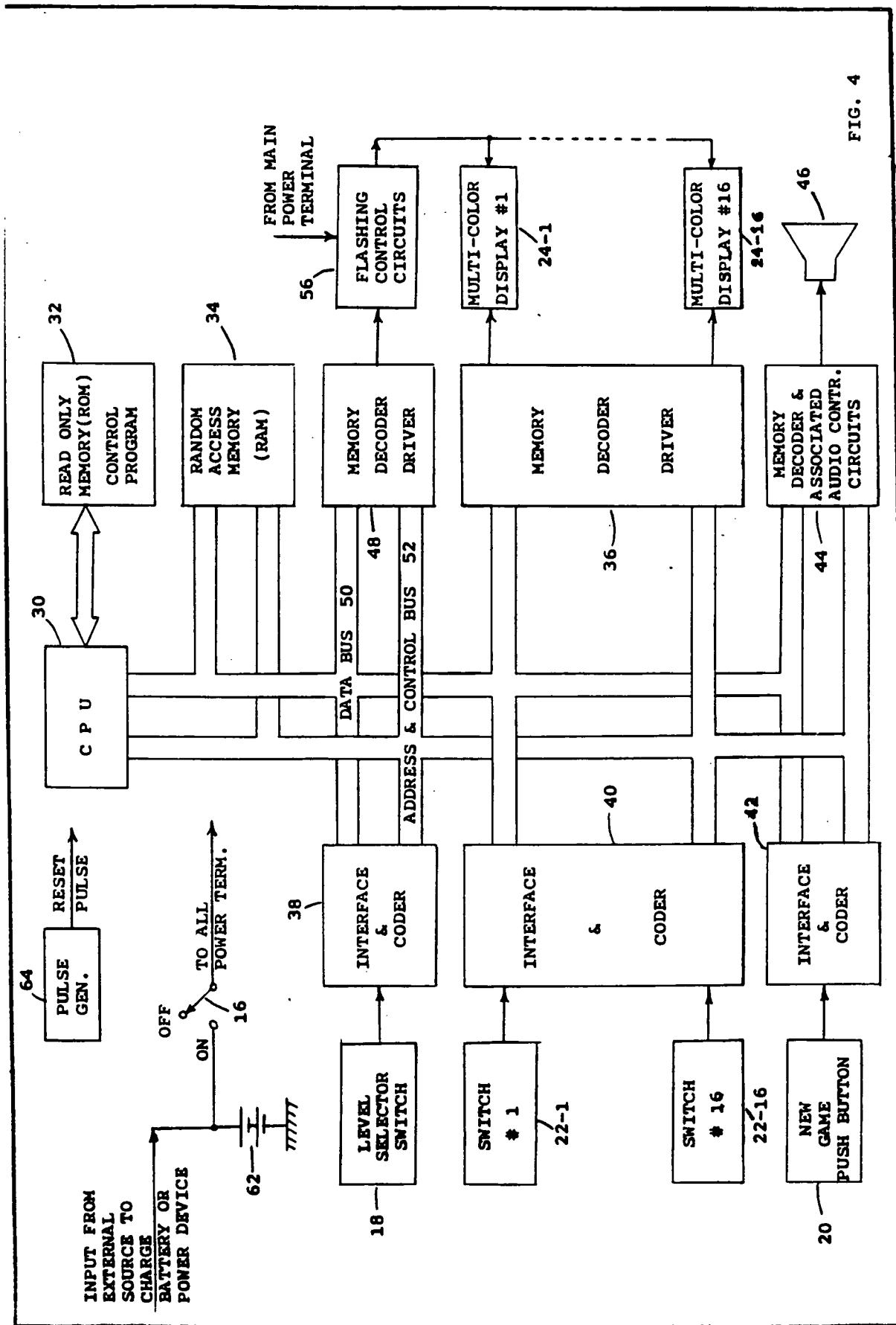


FIG. 4

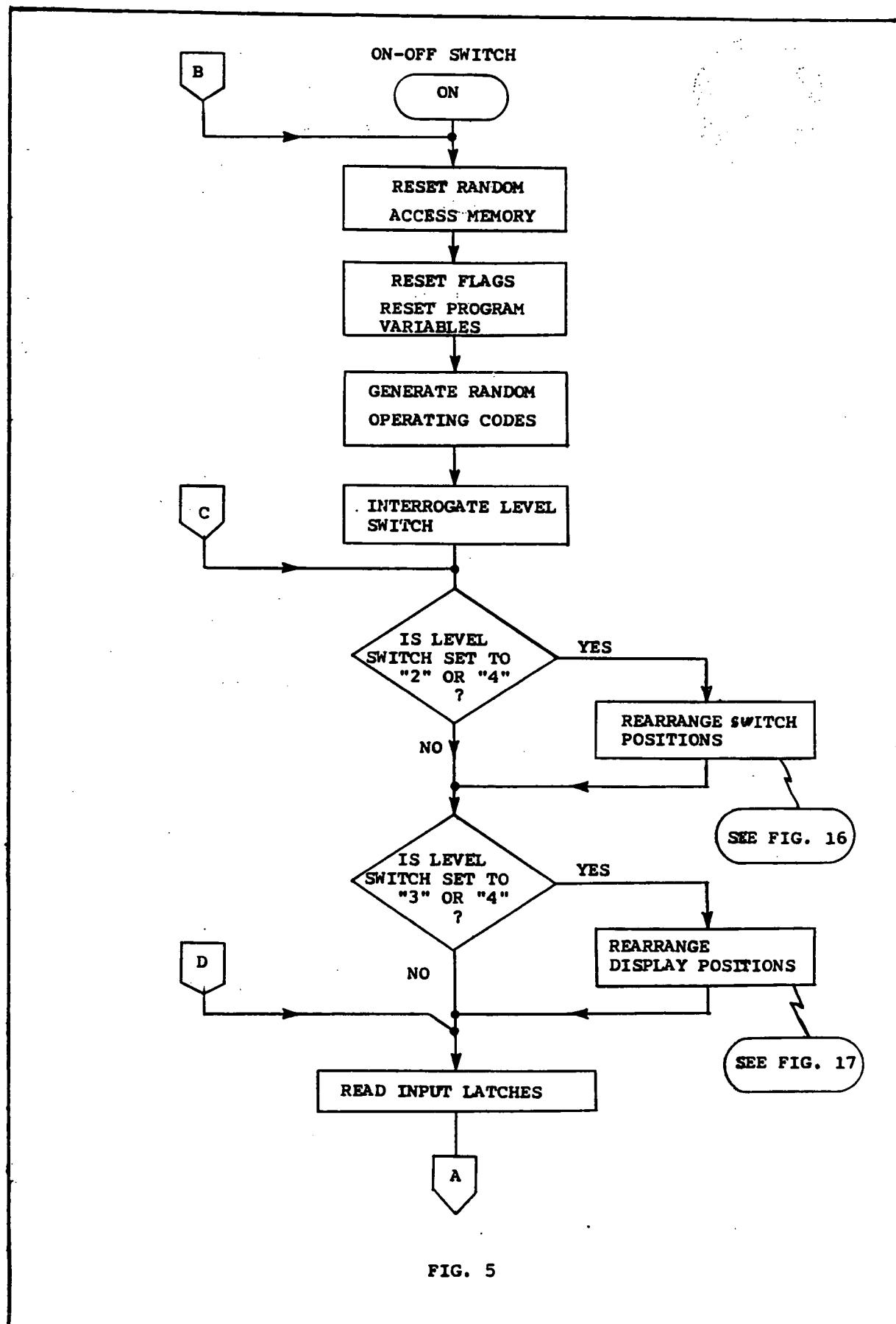


FIG. 5

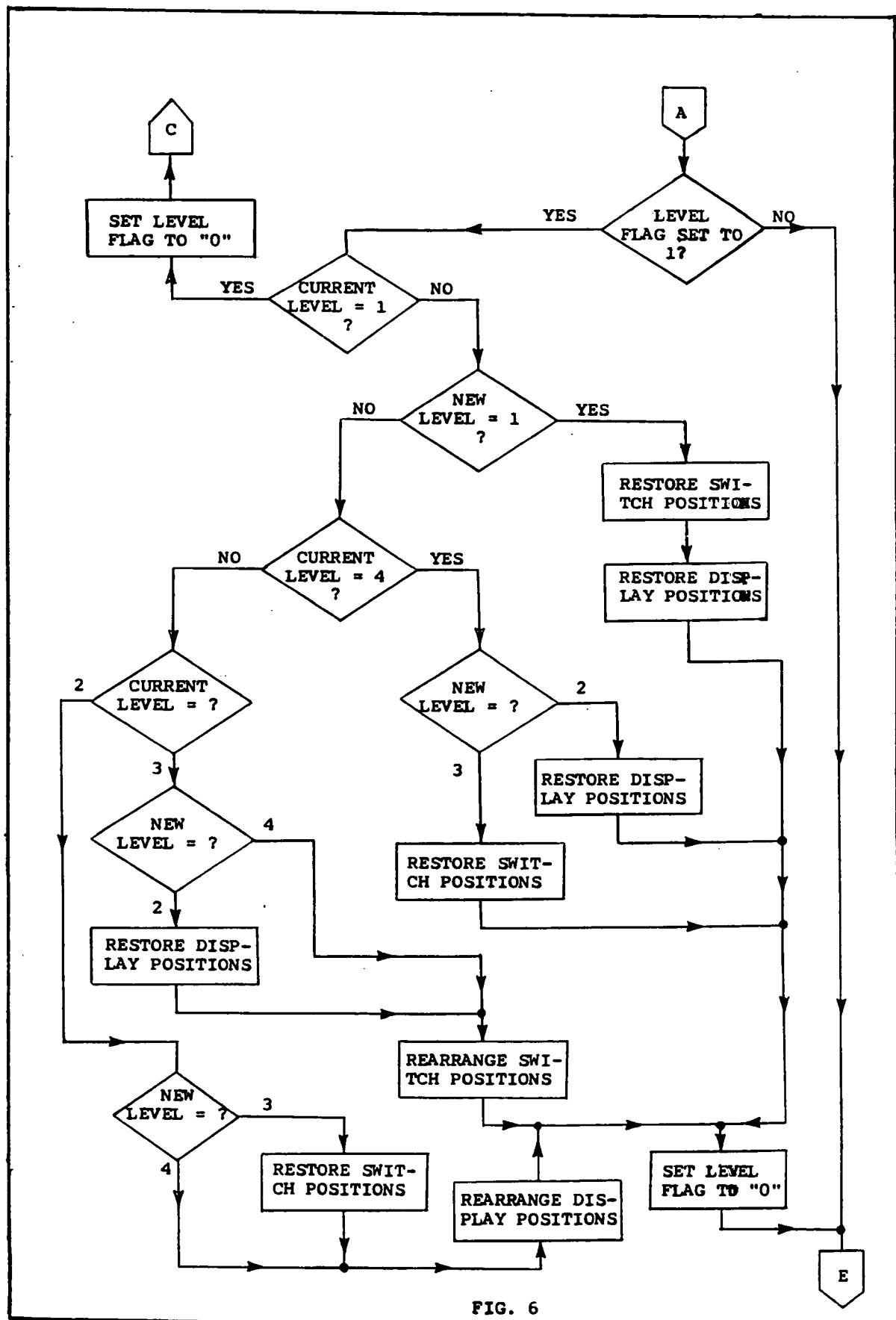


FIG. 6

11/754485

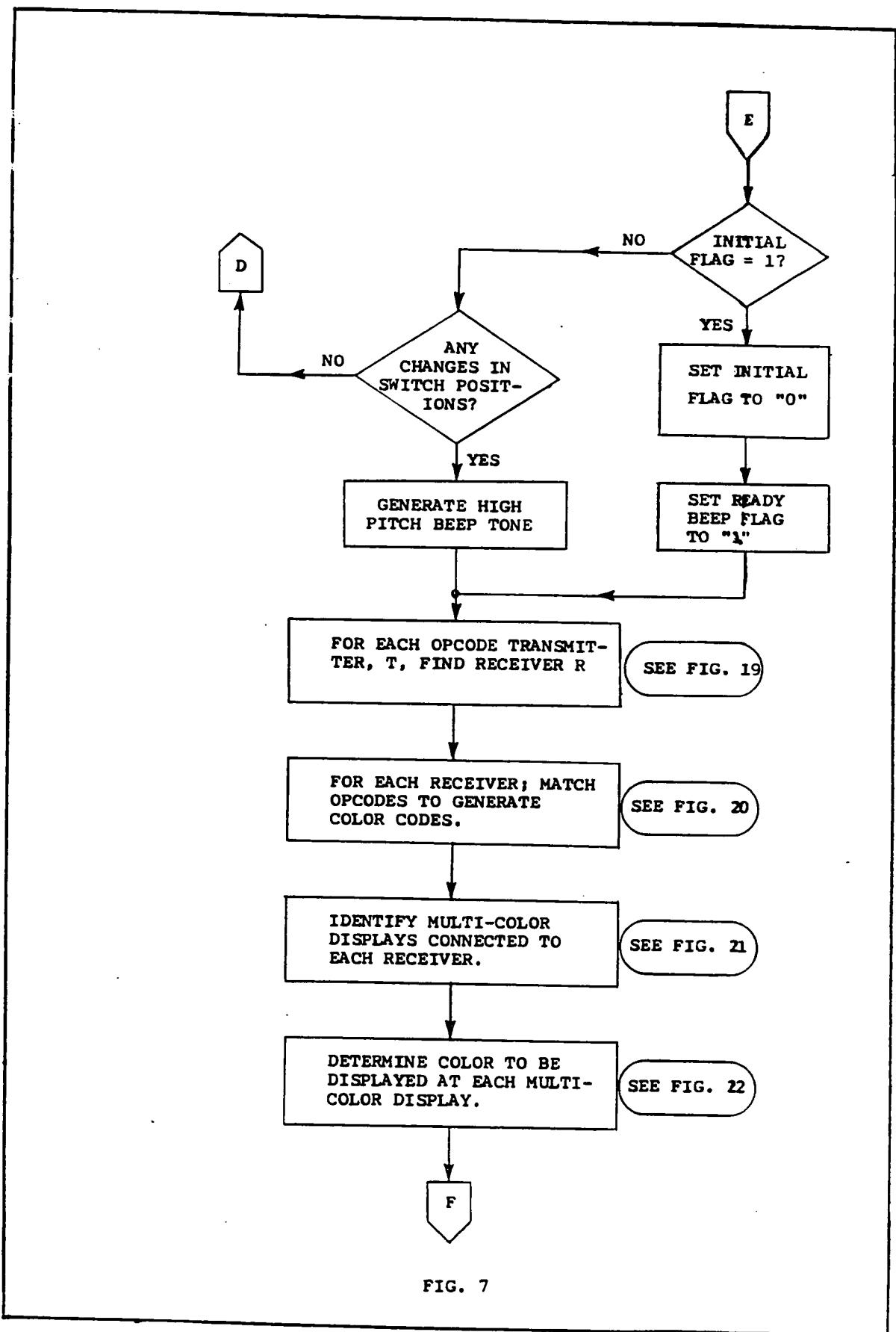


FIG. 7

07/754465

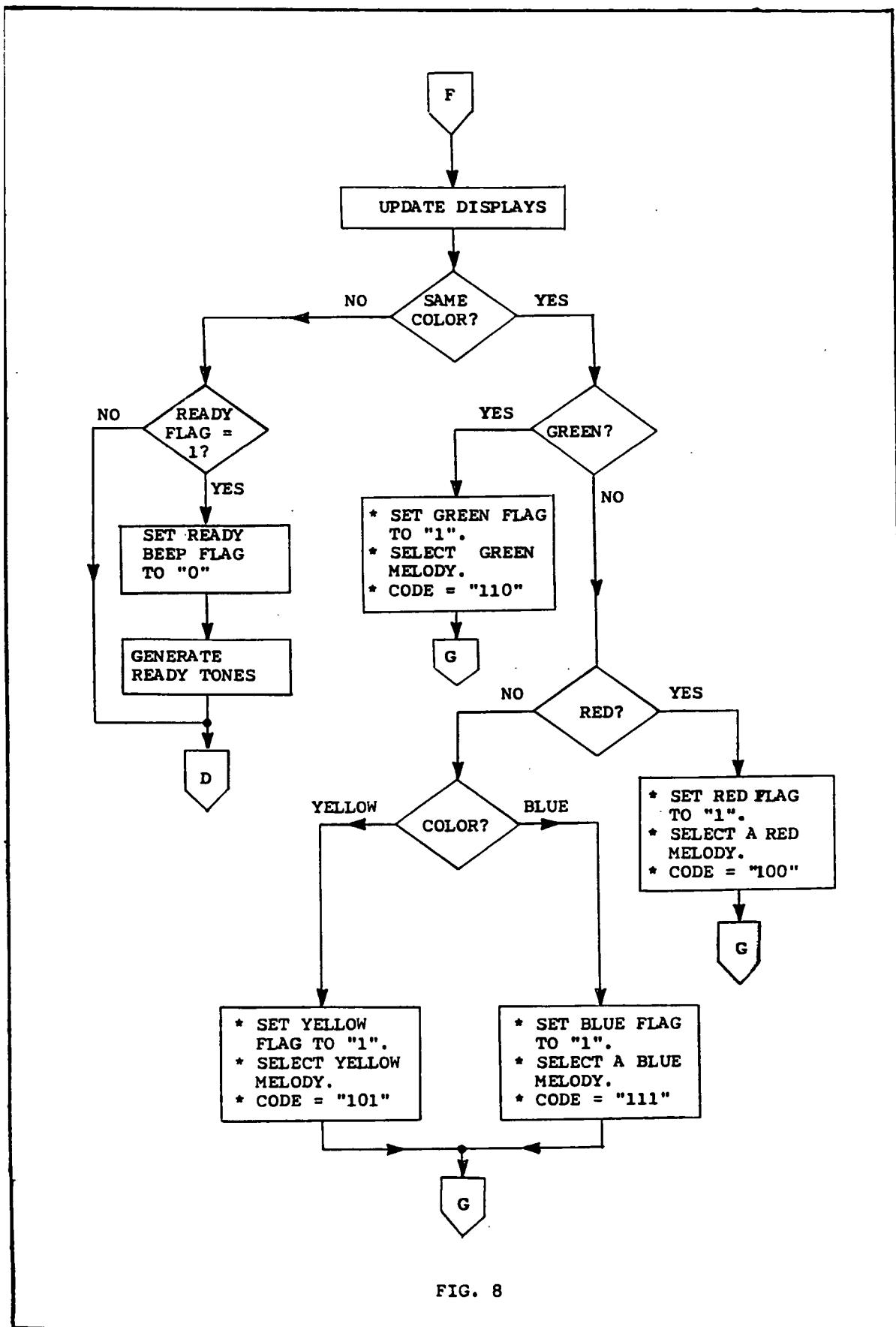


FIG. 8

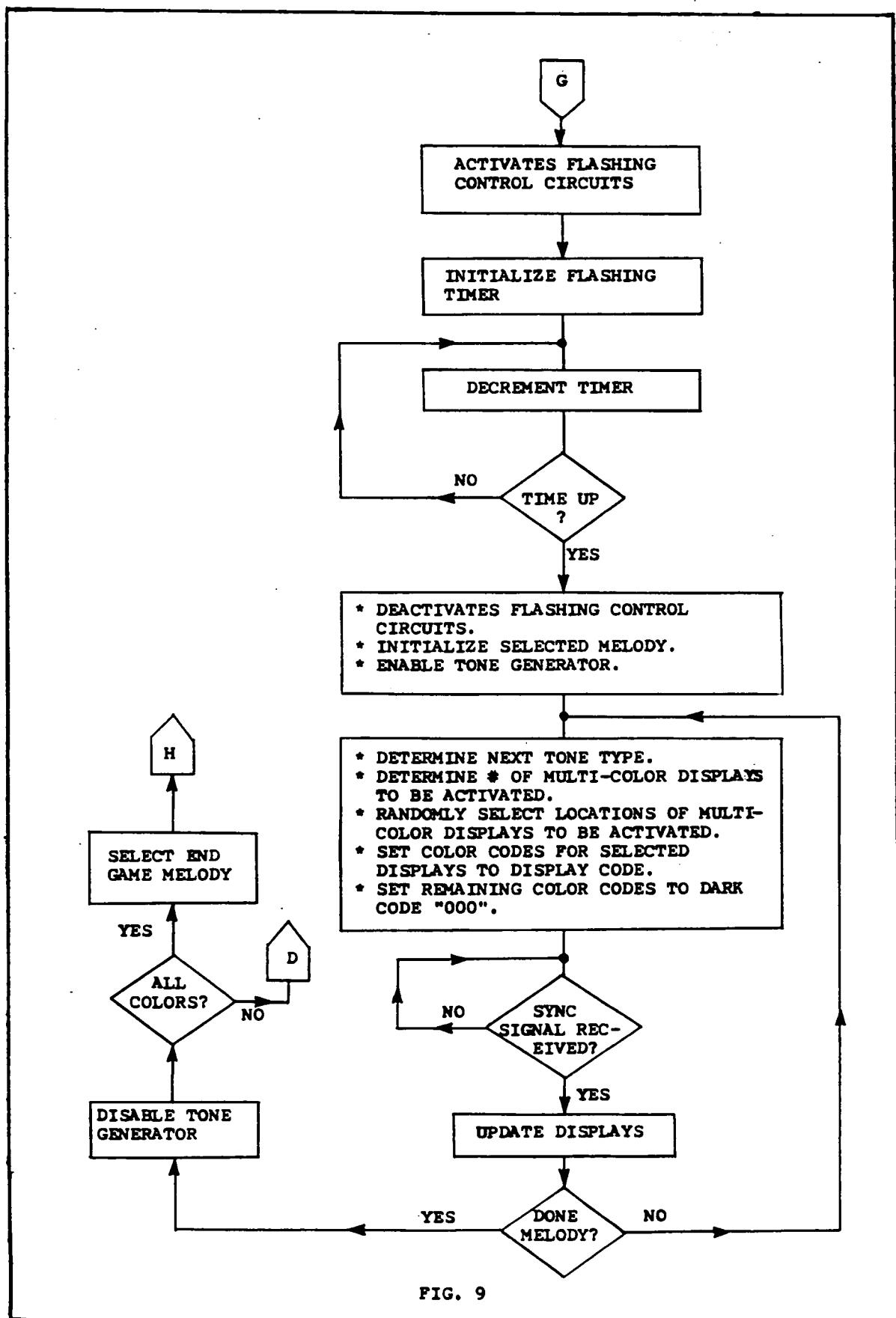


FIG. 9

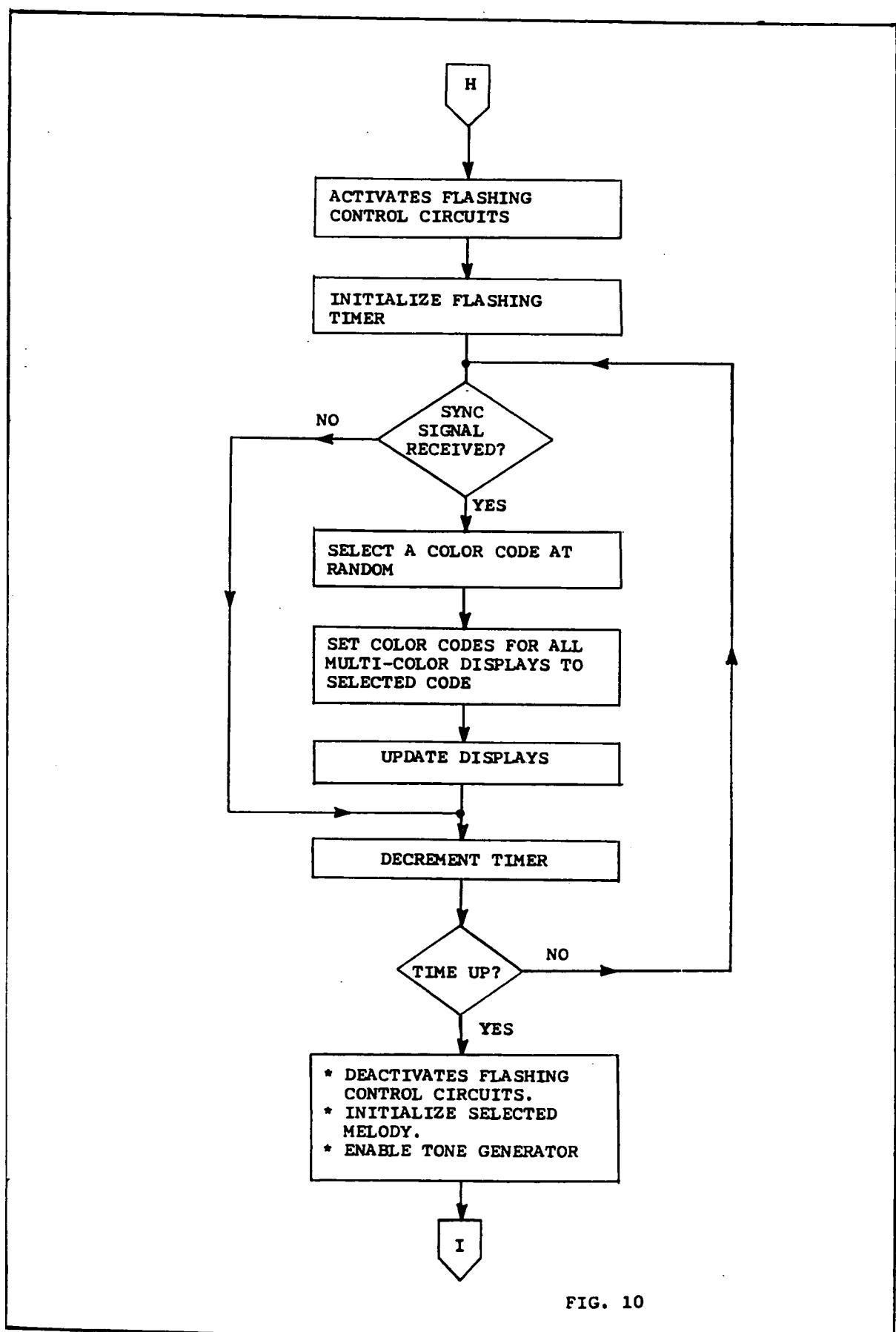


FIG. 10

11/754465

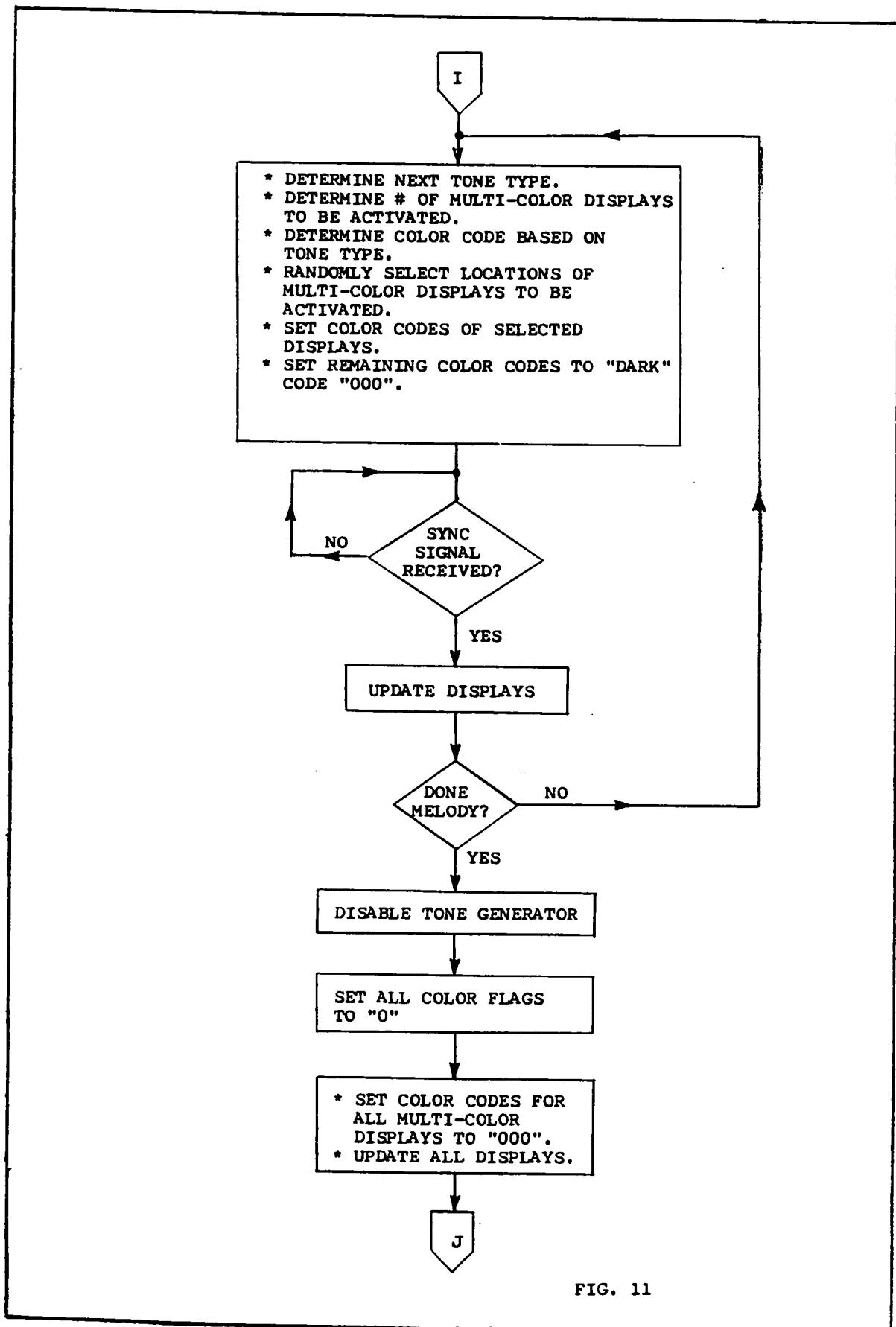


FIG. 11

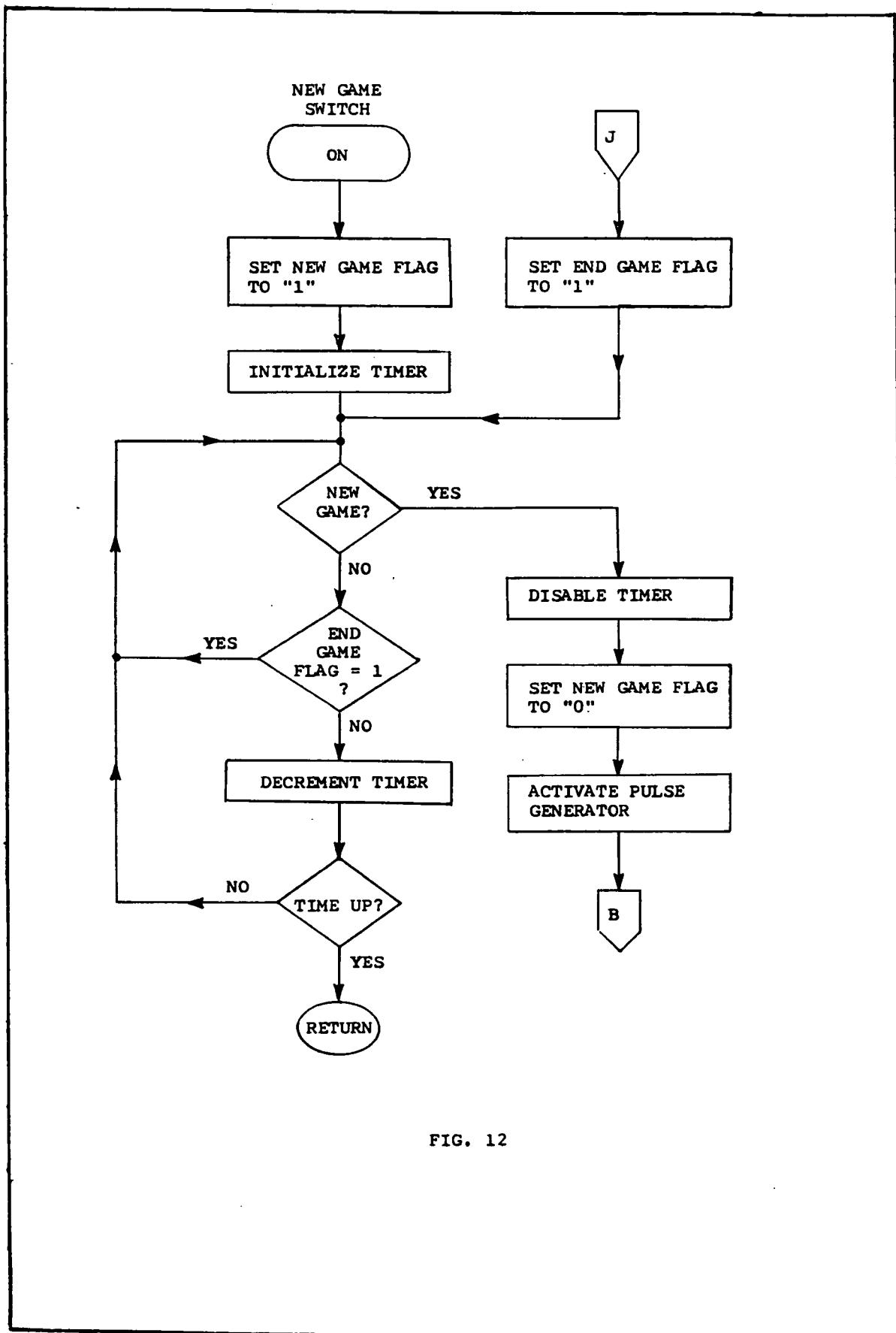


FIG. 12

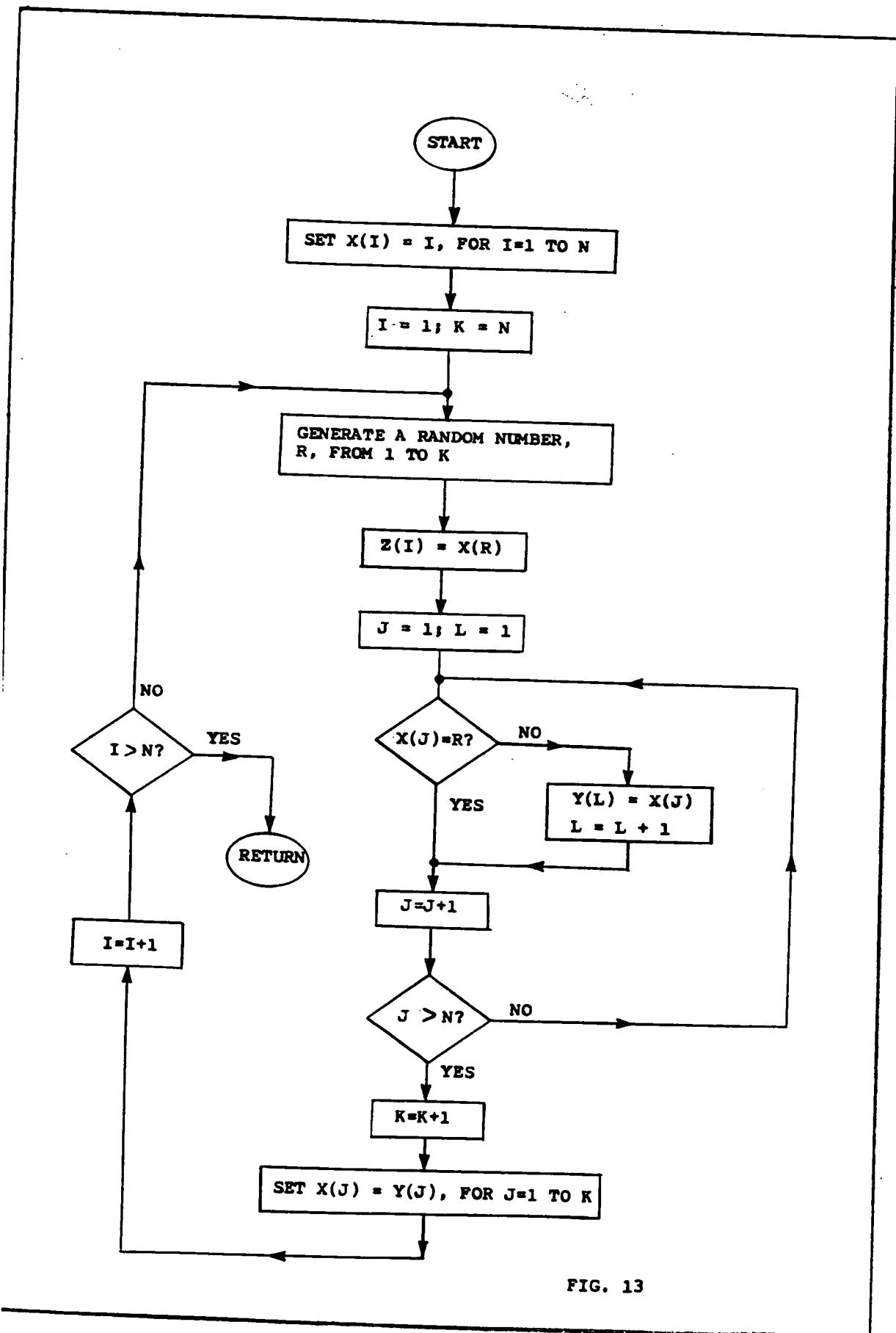


FIG. 13

07/754465

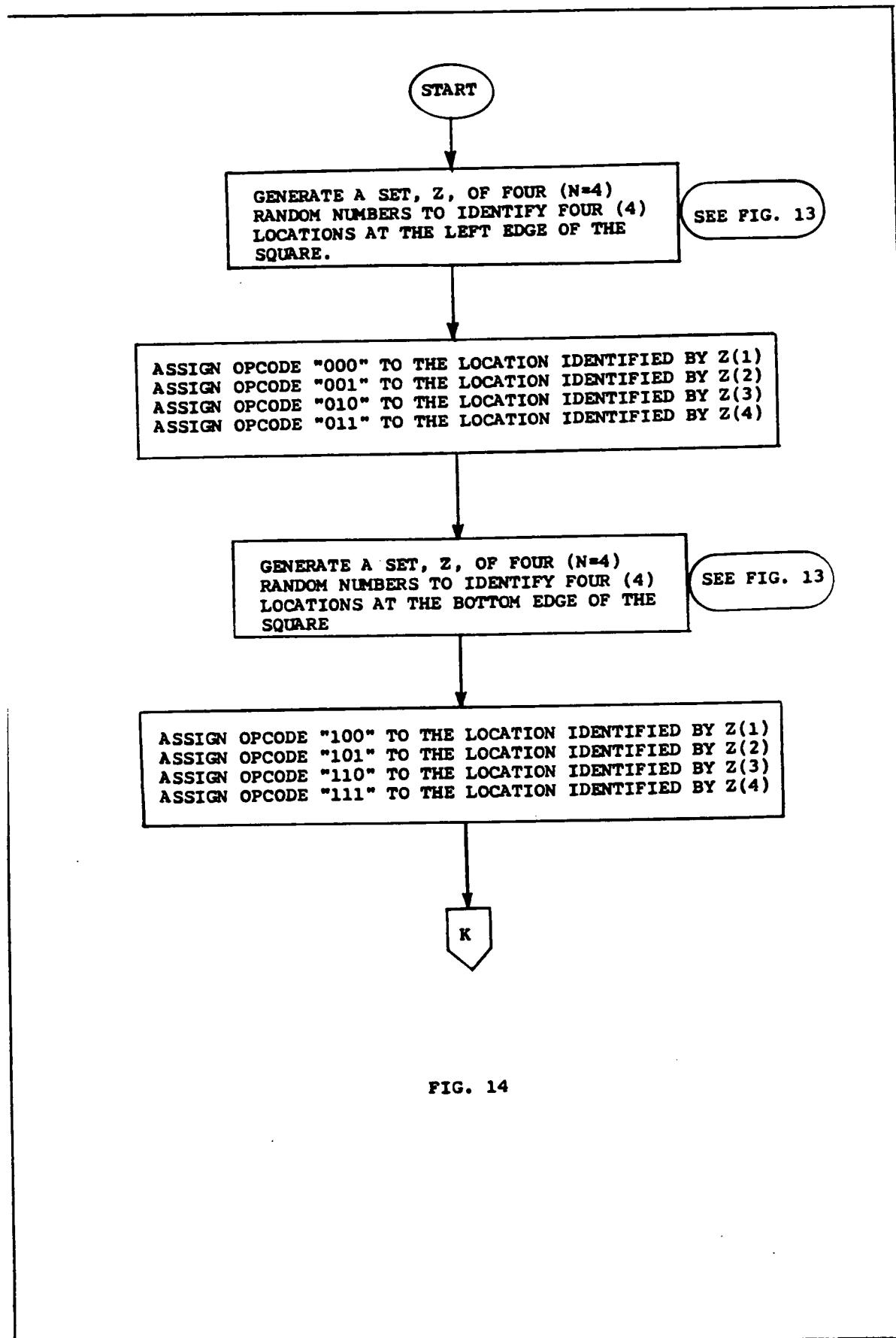


FIG. 14

11/754465

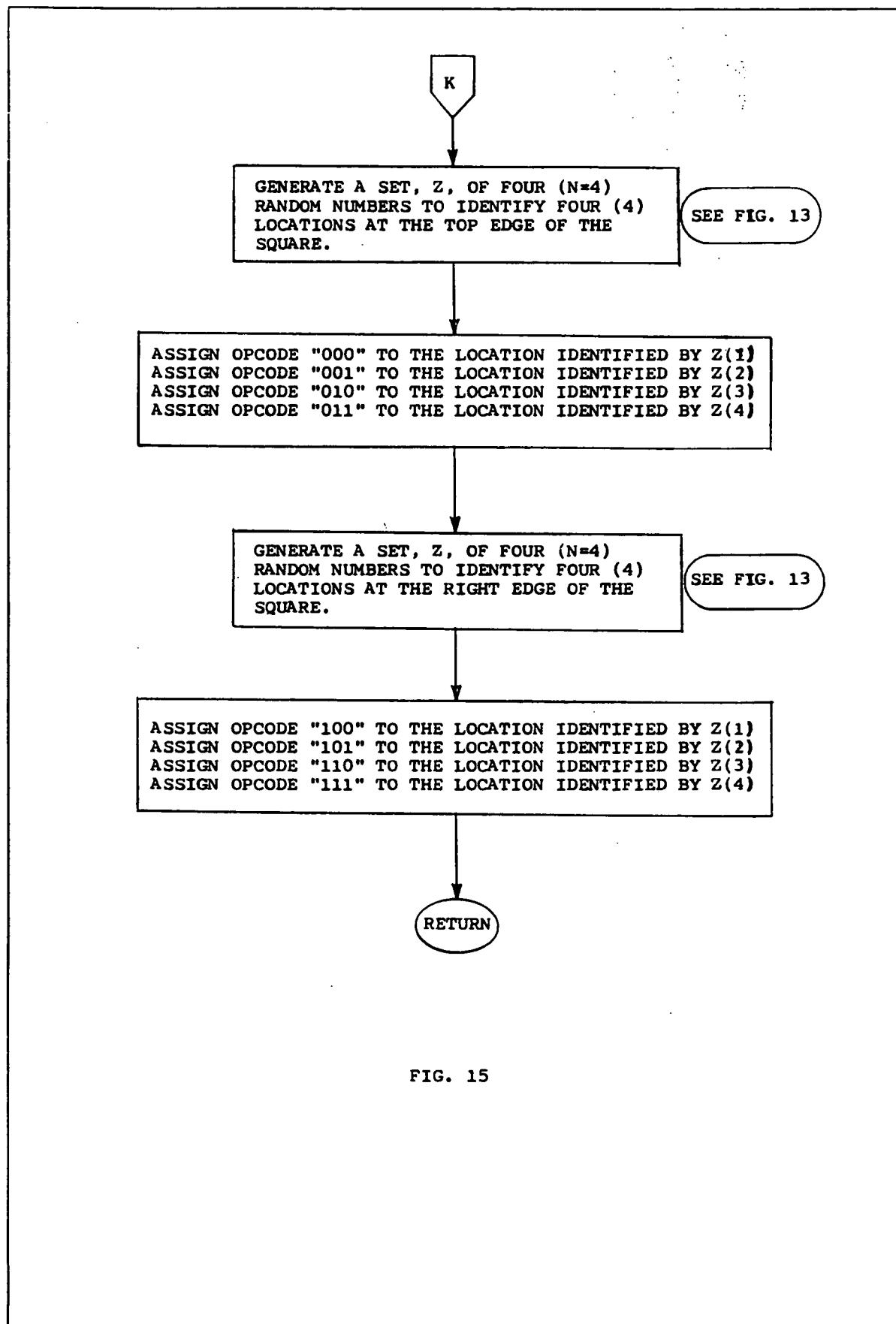
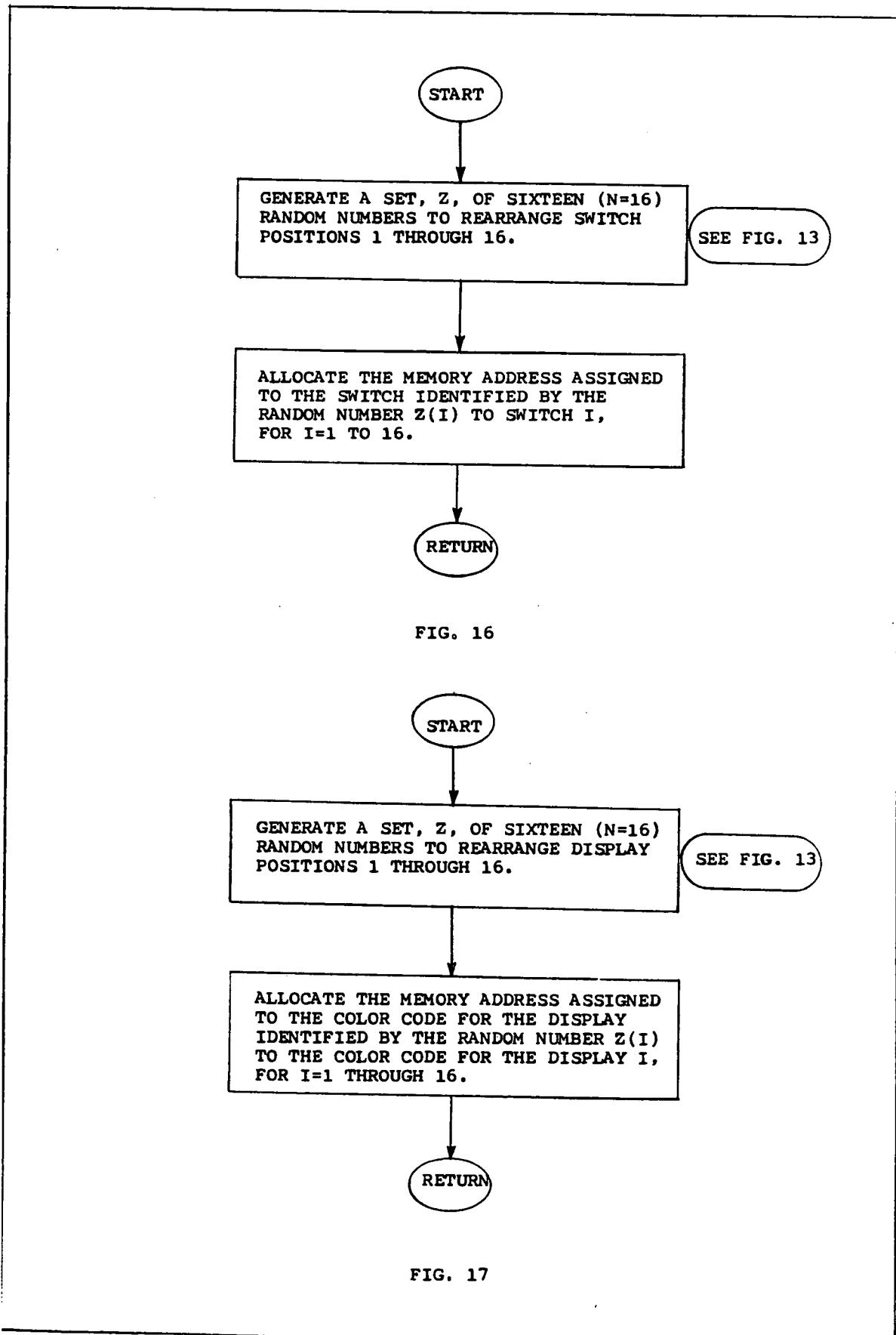


FIG. 15



11/754465

LEGEND

- N : DIMENSION OF RAINBOWX, i.e. NUMBER OF PREDETERMINED COLORS WHICH MAY BE DISPLAYED.
= 4 (FOR THE PREFERRED EMBODIMENT)
- n : NUMBER OF BINARY BITS IN OPCODE AND COLOR CODE.
= $\lceil \ln N + 1 \rceil = 3$ (FOR THE PREFERRED EMBODIMENT)
- I : ROW NUMBER I, I = 1, ..., N
- J : COLUMN NUMBER J, J = 1, ..., N
- DIR : ROUTE DIRECTION BETWEEN TWO ADJACENT ROUTING SQUARES;
"R" DENOTES RIGHT
"U" DENOTES UP
"L" DENOTES LEFT
"D" DENOTES DOWN
- T : OPCODE TRANSMITTER; T = 1, ..., 2N
- R : OPCODE RECEIVER; R = 1, ..., 2N
- RC(T) : RECEIVER CONNECTED TO TRANSMITTER "T"
- TC(R) : TRANSMITTER CONNECTED TO RECEIVER "R"
- W(I,J) : STATUS OF SWITCH LOCATED AT ROW "I" AND COLUMN "J"
- TCODE(T) : OPCODE AT TRANSMITTER "T"
- RCODE(R) : OPCODE AT RECEIVER "R"
- C(R) : COLOR CODE AT RECEIVER "R"
- x(i) : THE ith BIT OF OPCODE "X"
- y(i) : THE ith BIT OF OPCODE "Y"
- cb(i) : THE ith BIT OF COLOR CODE "C"
- C1(I,J) : COLOR CODE AT THE RIGHT EDGE OF THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"
- C2(I,J) : COLOR CODE AT THE TOP EDGE OF THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"
- C(I,J) : COLOR CODE SELECTED FOR DISPLAY AT THE ROUTING SQUARE LOCATED AT ROW "I" AND COLUMN "J"
- \oplus : EXCLUSIVE OR BOOLEAN FUNCTION
- \odot : INCLUSIVE OR BOOLEAN FUNCTION

EXPLANATION OF PROGRAM VARIABLES OF FIGS. 19 - 22

NOTE:

* SEE FIGURE 18 FOR EXPLANATION OF PROGRAM VARIABLES.

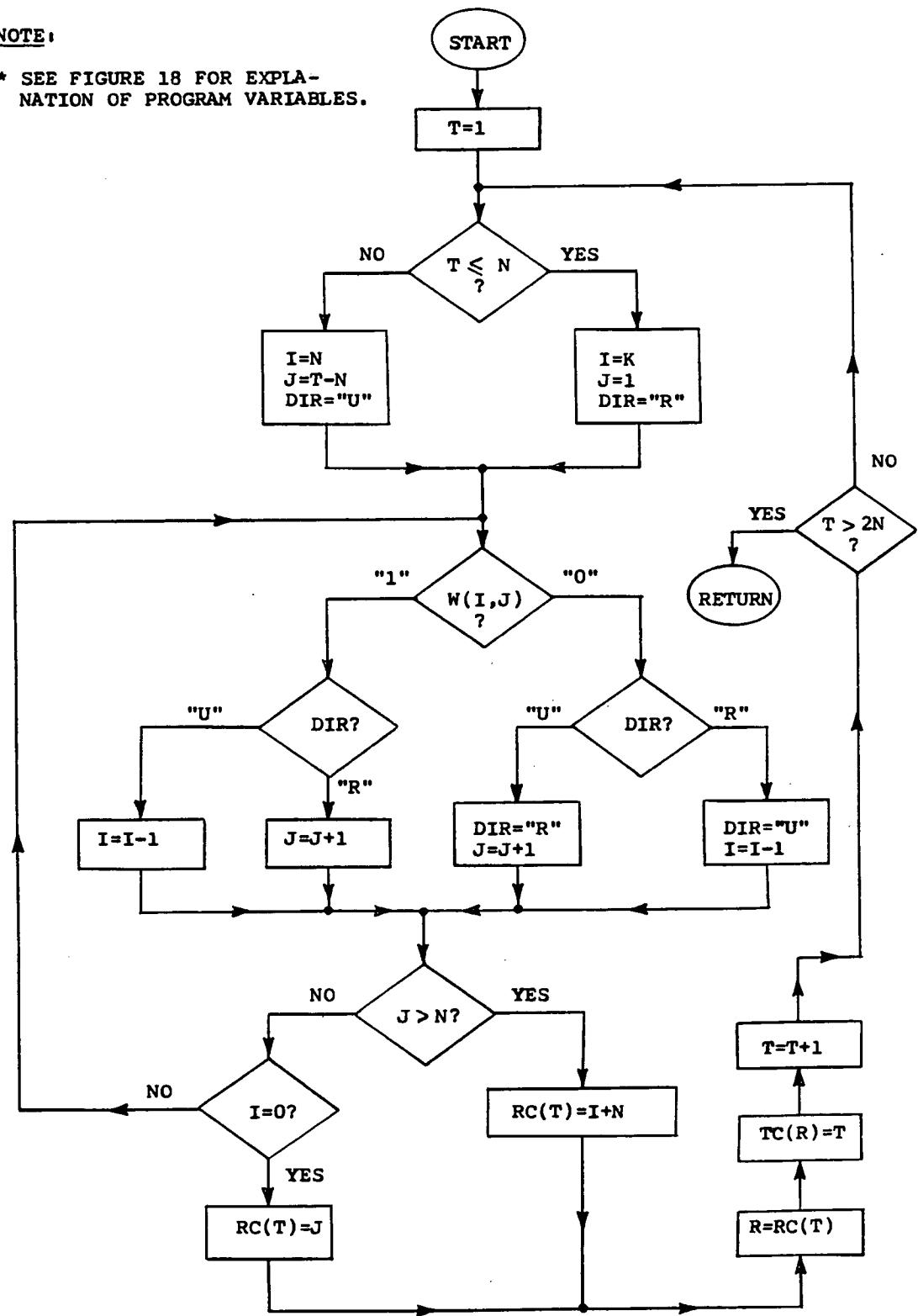


FIG. 19

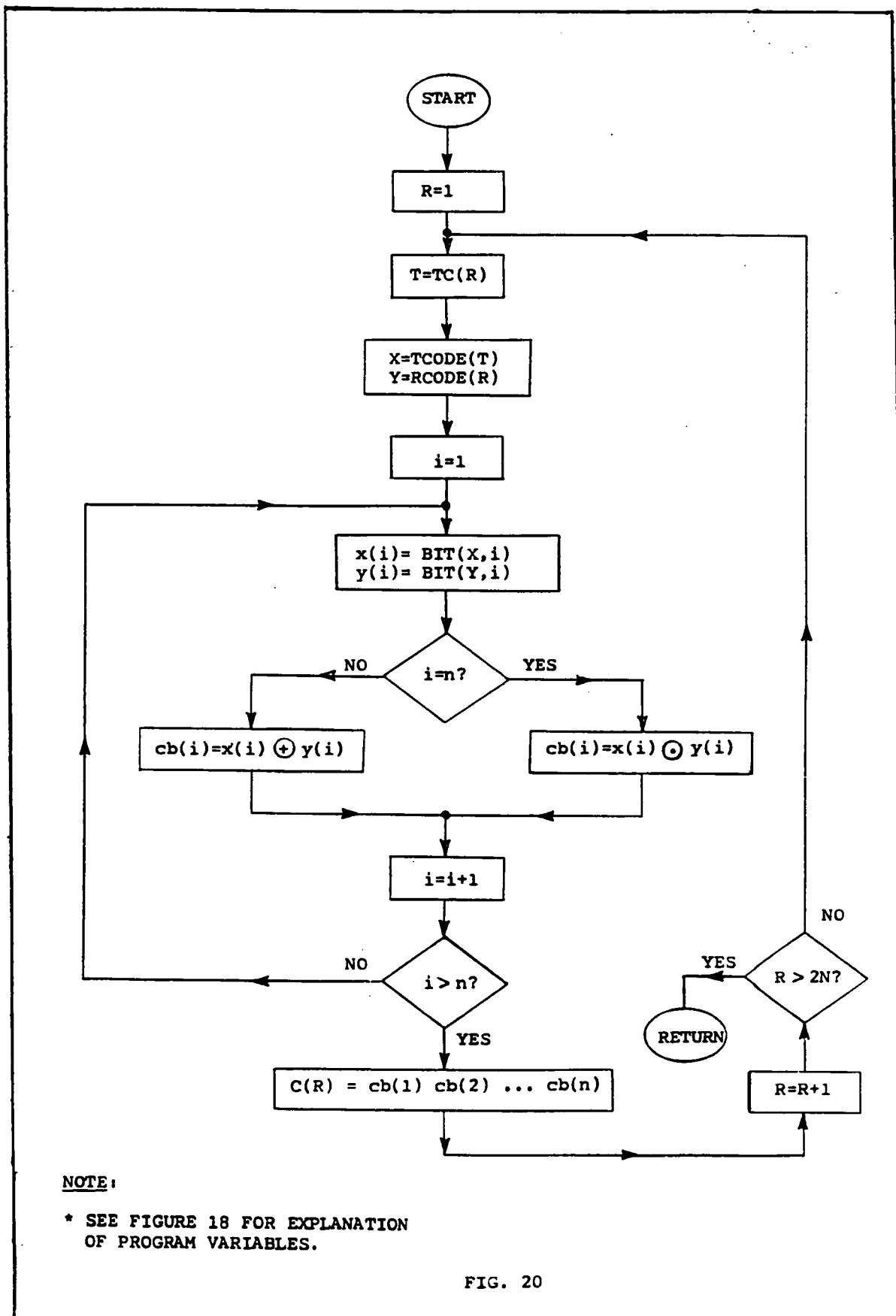


FIG. 20

NOTE:

* SEE FIGURE 18 FOR EXPLANATION OF PROGRAM VARIABLES.

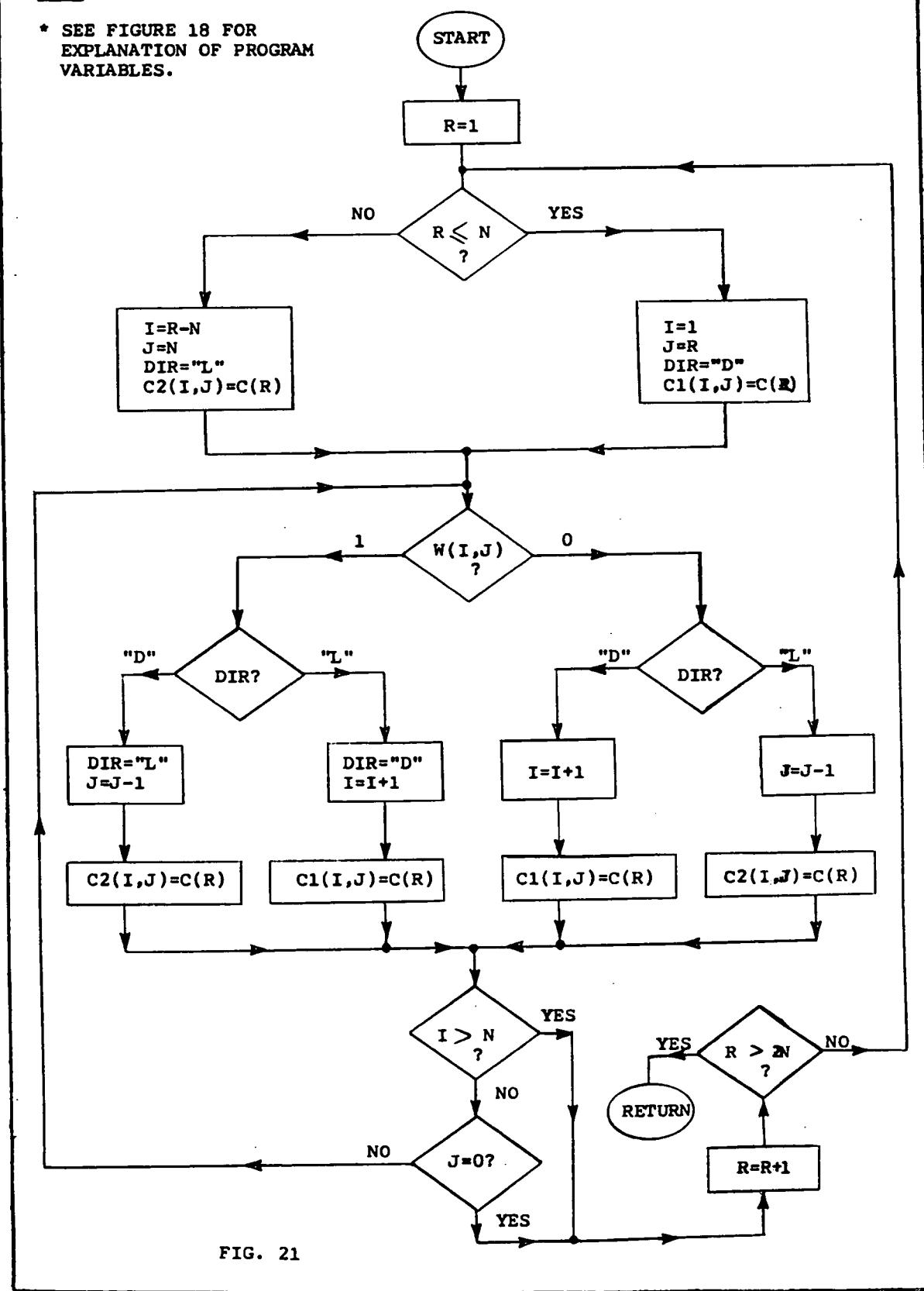


FIG. 21

11/754465

